CLAIMS

What is claimed is:

1. A mobile wireless monitoring device comprising:

an antenna for receiving signals from a monitored source;

a channel quality measurement device for measuring a channel quality of the received signals;

a location determining device for determining locations of the mobile wireless monitoring device; and

a processor for storing the channel quality measurements and a location for the channel quality measurements using the determined locations.

2. The mobile wireless monitoring device of claim 1 wherein the channel quality measurements include received signal strength, interference and Doppler shift.

3. The mobile wireless monitoring device of claim 1 wherein the mobile wireless monitoring device does not utilize outer loop power control when measuring the received signal strength.

4. A mobile wireless monitoring device comprising:

means for receiving signals from a monitored source;

means for measuring a channel quality of the received signals;

means for determining locations of the mobile wireless monitoring device; and

means for storing the channel quality measurements and a location for the channel quality measurements using the determined locations.

5. The mobile wireless monitoring device of claim 4 wherein the channel quality measurements include received signal strength, interference and Doppler shift.

6.   The mobile wireless monitoring device of claim 4 wherein the mobile wireless monitoring device does not utilize outer loop power control when measuring the received signal strength.

7.   A fixed wireless monitoring device comprising:

an antenna for receiving signals from a monitored source;

a channel quality measurement device for measuring a channel quality of the received signals;

an identification device for use in distinguishing the channel quality measurements of the fixed wireless monitoring device from other fixed monitoring devices; and

a transceiver for transmitting the channel quality measurements to the monitored source.

8.   The fixed wireless monitoring device of claim 7 wherein the channel quality measurements include received signal strength and interference.

9.   The fixed wireless monitoring device of claim 7 wherein the fixed wireless monitoring device does not utilize outer loop power control when measuring the received signal strength.

10.   A fixed wireless monitoring device comprising:

means for receiving signals from a monitored source;

means for measuring a channel quality of the received signals;

an identifier for use in distinguishing the channel quality measurements of the fixed wireless monitoring device from other fixed monitoring devices; and

means for transmitting the channel quality measurements to the monitored source.

11. The fixed wireless monitoring device of claim 10 wherein the channel quality measurements include received signal strength and interference.

12. The fixed wireless monitoring device of claim 10 wherein the fixed wireless monitoring device does not utilize outer loop power control when measuring the received signal strength.

13. A method for analyzing channel conditions in a cell, the method comprising:

preparing a baseline of cell channel conditions;

deploying wireless monitors through out the cell and the wireless monitors periodically reporting cell channel conditions; and

extrapolating current cell channel conditions from the baseline using the periodically reported cell channel conditions.

14. The method of claim 13 wherein if the current cell channel conditions exist for a predetermined time period, the baseline is adjusted.

15. A method for selecting a site for a base station, the method comprising:

providing a plurality of candidate base station sites;

for each site, broadcasting a channel;

moving a monitoring device throughout the cell and collecting channel quality measurements of the channel from each site; and

using the collected channel quality measurements of the channel from each site selecting an optimum site.

16. The method of claim 15 wherein the each site broadcasts the channel in a time multiplexed manner.